

REMARKS

STATUS OF THE CLAIMS

Claim 9 has been twice amended. Claims 54, 55, 59 and 60 have been once amended.

All claims as amended by this amendment are fully supported by the specification as filed. For example, the CI-2 like cucurbita maxima sequence S12897 is disclosed on pages 5 and 8 of the specification for use in the present invention and has about 35% identity with amino acids 19 to 83 of SEQ ID No. 2. As stated on page 8, S12897 and other CI-2 like polypeptides may be modified according to the methods and figures in the specification. This includes methods for the alteration of proteins to improve nutritional enhancement as described on pages 26 and 27 of the specification. Support for an amino acid sequence with 30% identity to a corresponding region of SEQ ID No. 2 is found on page 8, lines 17-18, of the specification. Applicants respectfully request that the Examiner consider these claims as now amended.

Should the Examiner have further questions or comments with respect to examination of this case, it is respectfully requested that the Examiner telephone the undersigned so that further examination of this application can be expedited.

Respectfully submitted,

By Steven J. Callistein
Steven J. Callistein
Registration No. 43,525
Attorney for Applicants

Pioneer Hi-Bred International, Inc.
Corporate Intellectual Property
7100 N.W. 62nd Avenue
P.O. Box 1000
Johnston, Iowa 50131-1000
Telephone: (515) 254-2823
Facsimile: (515) 334-6883

Versions With Markings to Show Changes Made

9. (~~once~~ twice amended) A plant CI-2 derived polypeptide ~~of~~ with at least 30% sequence identity to the polypeptide of SEQ ID: 2 and comprising greater than 50 amino acids in length and altered to have the following composition: 15-35 mole % lysine, 8-15 mole % methionine, 13-25 mole % threonine, 6-12 mole % tryptophan, 12-20 mole % isoleucine or combinations thereof; wherein the % sequence identity is based on the entire sequence and is determined by BLAST 2.0.
54. (~~new~~ once amended) The plant CI-2 polypeptide of claim 9, wherein the polypeptide comprises ~~a plant CI-2 derived polypeptide of greater than 50 amino acids in length and is altered to have 8-15 mole % methionine.~~
55. (~~new~~ once amended) The plant CI-2 polypeptide of claim 9, wherein the polypeptide comprising ~~a plant CI-2 derived polypeptide of greater than 50 amino acids in length and is altered to have 13-25 mole % threonine.~~
59. (~~new~~ once amended) A CI-2 derived polypeptide ~~of~~ with at least 60% sequence identity to the polypeptide of SEQ ID NO: 2 and comprising greater than 50 amino acids in length and comprising about 15 mole % or more lysine based on the total number of amino acid residues; wherein the % sequence identity is based on the entire sequence and is determined by BLAST 2.0.
60. (~~new~~ once amended) The CI-2 derived polypeptide of Claim 59, further comprising about 20 mole % or more lysine based on the total number of amino acid residues.